StarBoard Link EZ2-Pen

User's Guide

Read this User's Guide and carefully retain it for future reference.
Before using this product, carefully read and fully understand the safety instructions. Store this User's Guide nearby for ease of reference.

SBLE2P-ML120801

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The contents of this User's Guide are subject to change without prior notice.

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Hitachi Solutions, Ltd. assumes no responsibility for losses resulting from or related to the use of this product. Refer to "4. Appendix 4.5 Product Warranty Policy" at the end of this User's Guide for details on the warranty and liabilities.

Precautions Regarding Disposal

At time of disposal, handle this product as industrial waste according to all applicable laws and regulations.

Special Instructions

This manual contains explanations relating to accessories that are sold separately, as well as the product itself.

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This product is limited to use in the country where the user bought this product.

For warranty details, refer to "4. Appendix 4.5 Product Warranty Policy" at the end of this User's Guide.

This second edition of the user's guide (SBLE2P-ML120801) is for the following products:

AH00336: StarBoard Link EZ2-Pen（Overseas model）

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Manual Creation Dates

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Introduction

Thank you very much for purchasing Hitachi Solutions's StarBoard Link EZ2-Pen (henceforth referred to as "StarBoard").

This User's Guide has been created for people who already have a working knowledge of personal computers (henceforth referred to as "PC").

Please make sure that you understand the contents of this User's Guide and use the software correctly.

We hope that you make the most of this product.

Safe Handling

Markings and Symbols

Various markings and symbols are used in this User's Guide and on this product, to ensure the safe and correct use of this product and to prevent personal injury and property damage. These symbols and their meanings are as explained below. Understand the information well before reading the body of the User's Guide.

This is a Safety Warning symbol. This symbol will appear to raise the attention of the user to existing risks that may cause harm to people. To avoid any chances of injuries or possibly death, DO NOT IGNORE the safety instructions that follow this symbol.

⚠ WARNINGS

This warning will appear where there exists a risk of death or fatal injuries.

⚠ CAUTIONS

This warning will appear where there exists a risk of moderate or light injuries.

NOTICE

This warning will appear where there exists a risk of damage to property.

△	This symbol draws attention to cautions (including warnings).
⊘	This symbol indicates something prohibited.
●	This symbol indicates something that must be done.

Safe Precautions Required Precautions

(1) Precautions Regarding Operation

⚠ WARNINGS	
	Do not make modifications. Do not make any adjustments, repairs, or modifications not given in this User's Guide as doing so may lead to personal injury or damage to the product.
	Do not open or remove cover of this product. Failure to comply may lead to personal injury or damage to the product. Refer internal inspections, adjustments, and repairs to your dealer or support center.
	Do not place objects on top of this product. If a foreign object falls on top of or inside this product, it may lead to personal injury or damage to the product.

⚠ CAUTIONS	
	In order to prevent damage by static electricity, touch a nearby metal object with your hand to discharge any static electricity before touching this product. Static electricity from your body may cause damage to this product.

NOTICE	
	When connecting to the PC, use the bundled USB extension cable. If you use a USB extension cable other than bundled one, it may cause malfunction.
	Do not place heavy objects on, pull on, or subject the USB cable to excess heat. Failure to comply may result damage to the USB cable.
	Always grasp the plug of the USB cable when connecting or disconnecting. Pulling on the USB cable may result in scratching or damage to the cable.

(2) Dealing with Trouble

⚠ CAUTIONS	
	What to do in case of emission of smoke, strange odor, or strange noise If an abnormal condition such as emission of smoke, strange odor, or strange noise happens to occur for some reason, immediately disconnect the product's USB cable from the PC. Confirm that the smoke or strange odor is no longer being emitted and contact a support center to request repairs. Continued operation without repair may result in fire.
	What to do if the product breaks or the USB cable is damaged If this product breaks or the USB cable becomes damaged for some reason, immediately disconnect the USB cable from the PC and contact a support center. Continued operation without repair may result in emission of a strange odor or smoke.

(3) Precautions Regarding Handling

⚠ CAUTIONS	
	Do not splash with water or chemical compounds. Do not place this product in a location subject to contact with water droplets or place any containers containing water or other chemical compounds on top of or nearby this product. Failure to comply may result in damage or fire if water or chemical compounds get inside this product.

NOTICE	
	Disconnect the USB cable during extended periods of non-use. For safety reasons, disconnect the USB cable if the product is not going to be used for an extended period of time. Failure to comply may result in malfunction.
	Handle the connection cable properly. Improper handling of the connection cable such as jamming it against a wall, undue bending, pulling, or twisting may result in overheating or damage due to exposure of the conductive core, electrical short, or severing of the cable.

(4) Precautions Regarding Moving the Product

NOTICE	
	Always disconnect the USB cable from the PC when moving this product. Failure to comply may result in damage to the USB cable and/or the product itself.
	Do not subject to shock of impact. This product is a precision instrument. Excessive shock of impact may hinder further operation. Take extreme care when moving this product.

(5) Precautions Regarding Setup Environment

⚠ WARNINGS	
	Do not place in a location with flammable or corrosive gas. Placing this product in a location where there is flammable or corrosive gas may result in fire or damage to this product. There is a particular danger of explosion in the case of flammable gas. Do not place in a location with flammable or corrosive gas.
	Install this product on a flat surface. Installing this product on an uneven surface such as bumpy or curved surfaces may cause the product to operate improperly or fall over, resulting in personal injury or product malfunction.

⚠ CAUTIONS	
	Do not touch internally mounted parts. Directly toughing internally mounted parts inside this product may result in personal injury or damage to this product.
	Do not place in locations subject to excess moisture, dust, smoke, or steam. Placement in a location such as next to a kitchen or a humidifier may result in fire or damage to this product.
	Do not use this product near water. If water somehow gets inside this product, immediately disconnect the USB cable and contact a support center. Continued use may result in fire or damage to this product.

NOTICE	
	Do not use this product in locations subject to high temperature or high humidity. This product's usage environment conditions: Temperature: 5°C – 35°C Humidity: 20%RH – 80%RH (no condensation)
	Do not set up in locations subject to vibration and/or shock of impact. Vibration and/or shock of impact may harm internal components of this product, resulting in damage to it. Do not set up this product in a location subject to vibration or shock of impact.
	Do not set up this product near a high-voltage line or power source. If this product is set up near high-voltage lines or power sources, it might receive interference.
	Do not set up in a location subject to direct sunlight or near a heater. Failure to comply may result in deformation of or damage to this product.

(6) Precautions Regarding Disposal

NOTICE	
	At time of disposal, handle this product as industrial waste according to all applicable laws and regulations. When disposing of this product, the user should follow all laws and regulations of the locality in which it is being used.

Careful thought was given to the cautions on this device and in this User's Guide. However, unanticipated circumstances might occur. When operating this product, users themselves must exercise caution as well as follow instructions.

⚠WARNINGS

Warnings Contents	Page(s)
Install this product on a vertical surface. Do not install this product on a slanting surface or ceiling. Otherwise, the equipment might fall, possibly resulting in injury, or the impact might cause product failure.	P.2-1
If magnets are not used to install this product, fix it in place with screws. Otherwise, the equipment might fall, possibly resulting in injury, or the impact might cause product failure.	P.2-1

NOTICE

Notice Contents	Page(s)
- Select a level and stable position. - Do not set it up near equipment that might generate electromagnetic waves or radio frequencies, such as radio transmitters, televisions, copying machines or air conditioners. - Avoid locations that are dusty, that are subject to extremely high or low temperatures or humidity, or that are exposed to direct sunlight.	P.2-1
The gap between the cursor and pen will become big in the lower 13cm (5 inches) of the digitizer. If you want to reduce the gap, place the digitizer keeping a minimum space of 13cm (5 inches) from the upper part of the centre of the projection area.	P.2-2
Using infrared and compact cameras, this product captures the image (reflected light) of a pen and detects the corresponding coordinate position. Do not operate near lighting that will obstruct the capture of the image. - Locations where the surface or side of the projection area are exposed to direct sunlight. - Locations in which there are light fittings with many light bulbs or infrared rays directly above the projection area. - The place where there is some reflective object around projection area. (Reflective bars or pen which is not used interactive white board built-in reflection tape, etc...)	P.2-6 P.4-4

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1. Introduction

1.1 Preparations

This chapter describes the preparations to be made before using StarBoard.

First-time users of StarBoard should read through this chapter.

1.1.1 Product Outline

In order to use the StarBoard Link EZ2-Pen, a digitizer are installed on an existing whiteboard or flat wall surface. After setting up the provided software on a PC that is connected to a projector, you can use the pen to operate the projected PC screen, or import characters or images drawn on the projection area in real time to the PC.

1.1.2 Features

- You can use the pen to operate the PC

  You can use the pen to operate the PC screen projected onto the board with the projector.

- You can write directly onto the PC screen

  After installing the provided StarBoard Software onto a PC, you can use the pen to write characters or images directly onto the PC screen. The input characters or drawn images are imported as digital data in real time into the PC, where they can be saved or printed.

- Compatible with PowerPoint presentations

  Characters or images can be written into presentations created with Microsoft PowerPoint, which significantly improves the expressive power of the presentations.

- You can also write on video images (For Windows)

  Characters or images can be written onto captured video image displays.

  This makes it easy to use video materials in lessons or presentations.

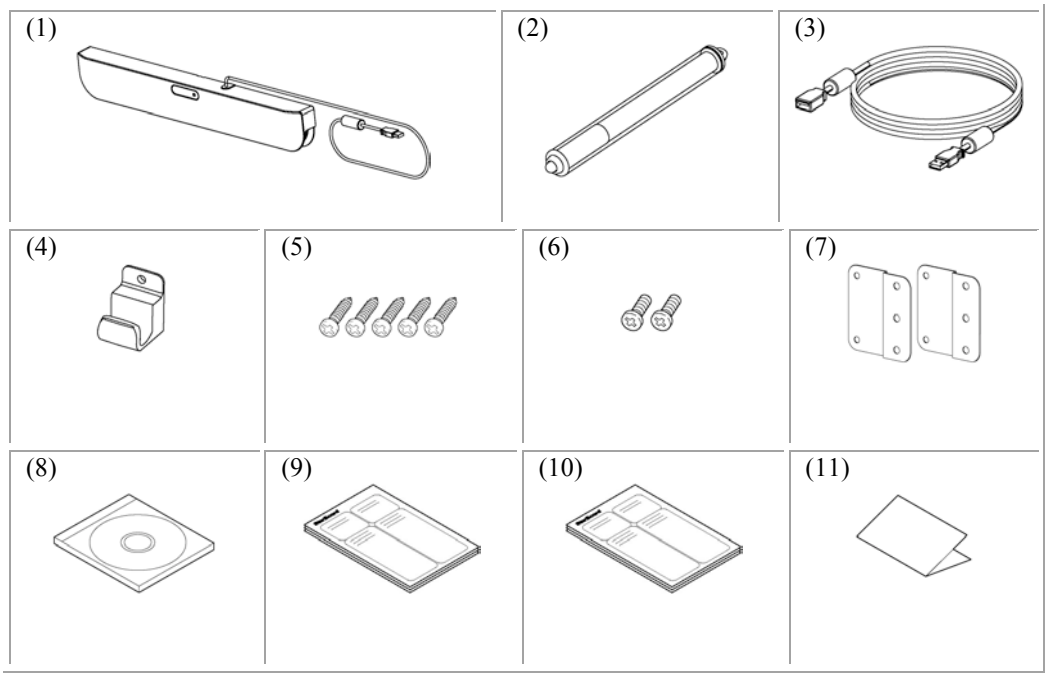
1.2 Parts Check

After unpacking, make sure that all the following parts are present.

1.2.1 StarBoard

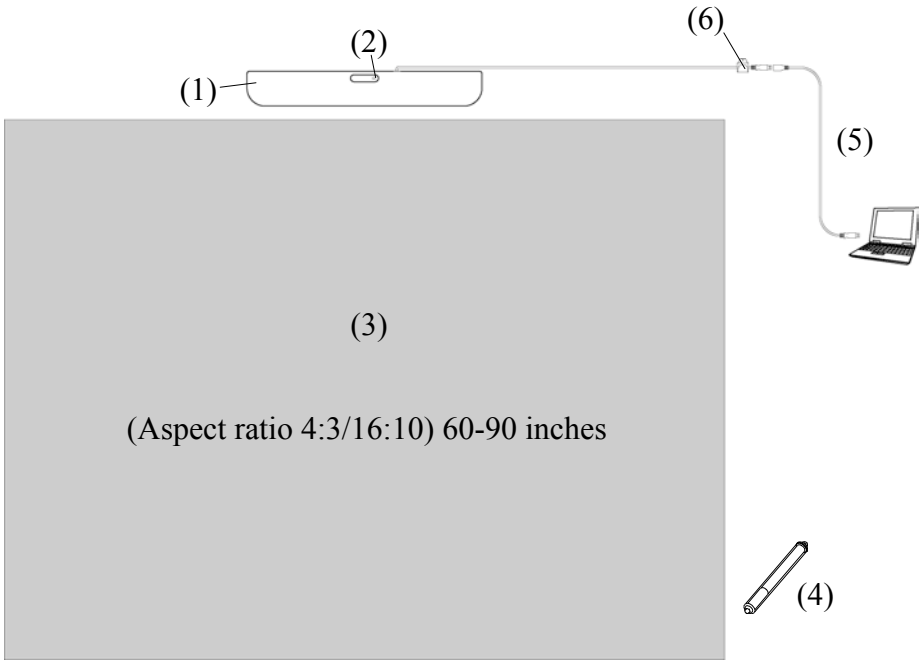
[1] Parts

No.	Name	Qty
(1)	Digitizer	1
(2)	Pen (Reflective Pen)	1
(3)	USB extension cable	1
(4)	Cable holder	1
(5)	Wood screws	5
(6)	Machine screws	2
(7)	Wall mount bracket	2
(8)	StarBoard Software DVD-ROM	1
(9)	StarBoard Software Startup Guide	1
(10)	StarBoard Link EZ2-Pen Startup Guide	1
(11)	Warranty Sheet	1



1.3 Role of Each Part

1.3.1 StarBoard



StarBoard Link EZ2-Pen Installation Image

(1) Digitizer
Receives information regarding characters or images drawn with the pen, and transmits this data to the PC.

(2) Status LED
The connection status is displayed by the color and lighting status of the LED.
Lit green: Normal
Flashing orange: Recognizing StarBoard
Lit orange: Error has occurred

(3) Projection area/Input area
Characters or images drawn in this area are imported into the PC.

(4) Pen
Used in pen input.

(5) USB extension cable
Used to connect the StarBoard with the PC.

(6) Cable Holder
Used to fix the USB cable in place.

2. Assembly and Setup

Be sure to follow the precautions below when installing the StarBoard.

Important

Use on a flat surface.

This product is designed so that stable input is achieved when used on a flat surface. Do not use on an uneven or curved surface.

⚠WARNINGS

Install this product on a vertical surface.

Do not install on a slanted surface or ceiling. Failure to comply may cause the stand to fall, resulting in personal injury, or may cause damage to this product due to shock of impact from the board falling.

If magnets are not used to install this product, fix it in place with screws.

Failure to comply may cause the stand to fall, resulting in personal injury, or may cause damage to this product due to shock of impact from the board falling.

NOTICE

- Select a level and stable position.
- Do not set it up near equipment that might generate electromagnetic waves or radio frequencies, such as radio transmitters, televisions, copying machines or air conditioners.
- Avoid locations that are dusty, that are subject to extremely high or low temperatures or humidity, or that are exposed to direct sunlight.

2.1 Installing the StarBoard Software

Before Starting to Connect Equipment

Install the StarBoard Software on your PC before starting to connect equipment. The equipment might not operate correctly if it is connected without the software being installed.

About PC Earth

Depending on your PC, an incorrect operation might be caused by PC noise via the USB cable. If this happens, verify that the earth of your PC's power supply cable is connected.

If the earth is not connected, it might cause an incorrect operation.

2.2 Installing the Devices

NOTICE

The gap between the cursor and pen will become big in the lower 13cm (5 inches) of the digitizer.

If you want to reduce the gap, place the digitizer keeping a minimum space of 13cm (5 inches) from the upper part of the centre of the projection area.

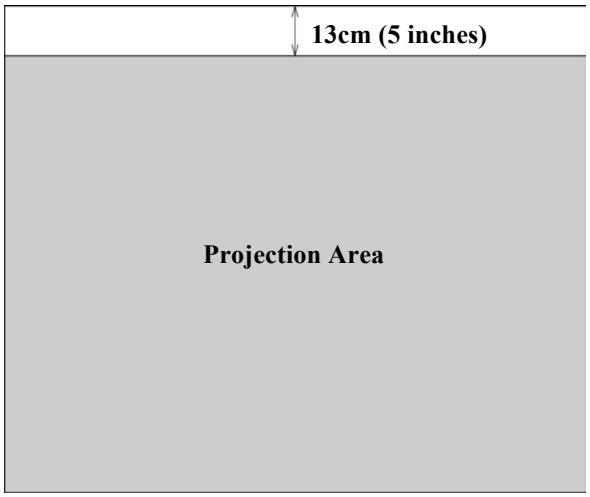
2.2.1 Projection from the Projector

Project the computer screen using the projector.

To install the StarBoard, ensure the following clearance is maintained around the projection area.

However, the StarBoard detectable sizes are as shown below.

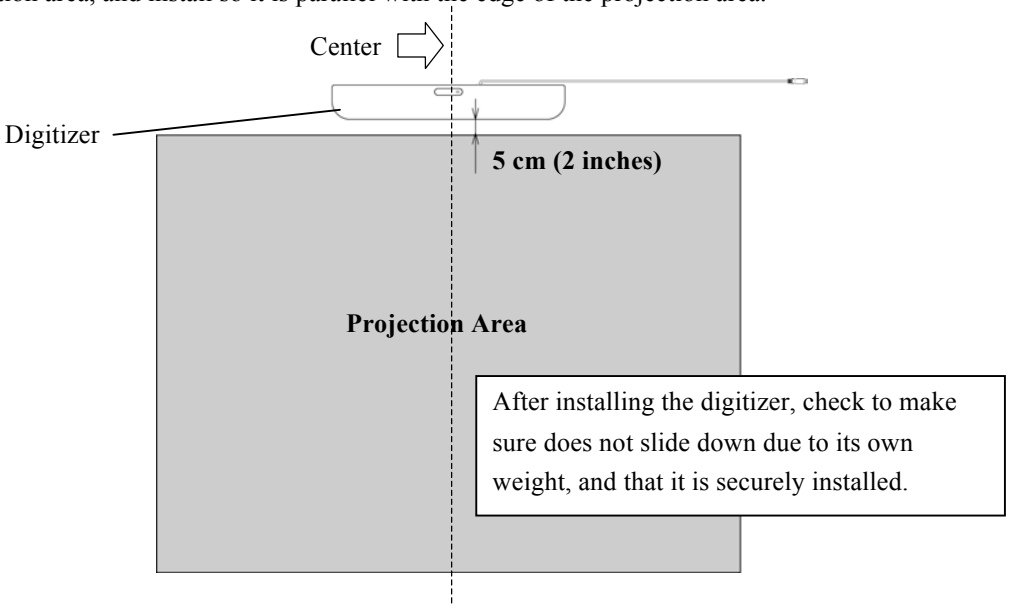
(Aspect ratio 4:3/16:10) 60-90 inches



2.2.2 Installing the Digitizer

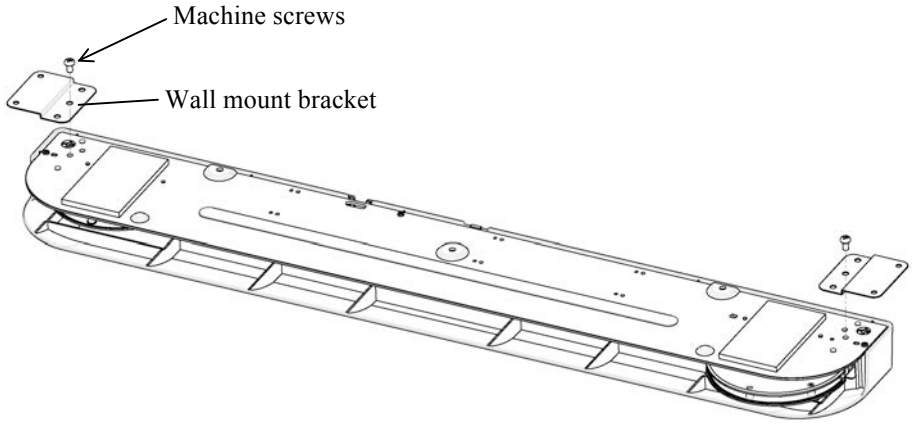
▪ Installing with Magnets

Align the center of the digitizer with the center of the projection area, 5cm (2 inches) above the projection area, and install so it is parallel with the edge of the projection area.

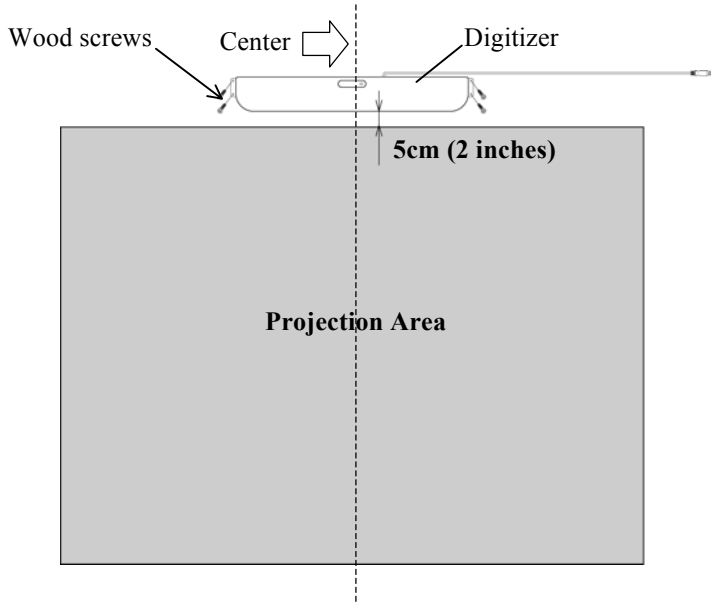

Center
Digitizer
5 cm (2 inches)
Projection Area
After installing the digitizer, check to make sure does not slide down due to its own weight, and that it is securely installed.

▪ Installing to walls where magnets cannot be used.

(1) Fix the wall mount bracket on the back of the digitizer, with 2 machine screws.

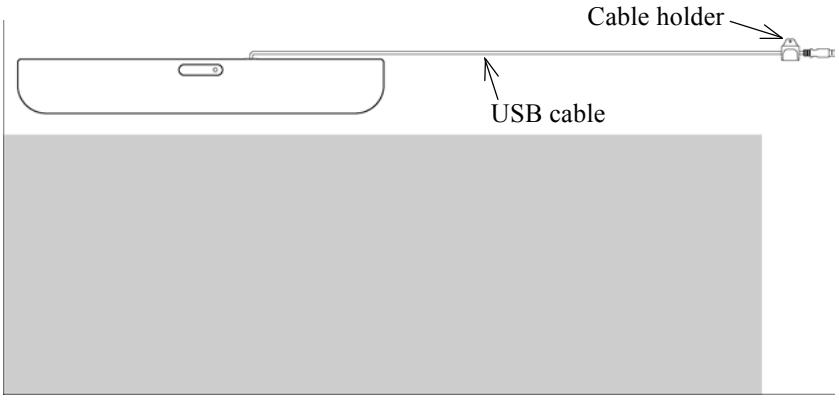


(2) Align the center of the digitizer with the center of the projection area, 5 cm (2 inches) above the projection area, and install so it is parallel with the edge of the projection area.



2.2.3 Connecting the USB Cable

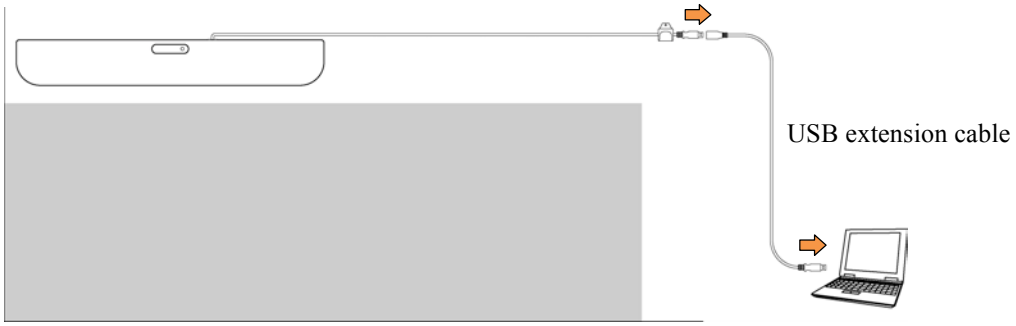
(1) Install the cable holder, and then hook the USB cable into the holder to fix it in place.



Fixing Screws

When installing onto a wall where magnets cannot be used, fix the cable holder with wood screws.

(2) Connect the bundled USB extension cable to the computer.



2.2.4 Adjusting the Sensor

NOTICE
Using infrared and compact cameras, this product captures the image (reflected light) of a pen and detects the corresponding coordinate position. Do not operate near lighting that will obstruct the capture of the image. - Locations where the surface or side of the projection area are exposed to direct sunlight. - Locations in which there are light fittings with many light bulbs or infrared rays directly above the projection area. - The place where there is some reflective object around projection area. (Reflective bars or pen which are not used, interactive white board built-in reflection tape, etc...)

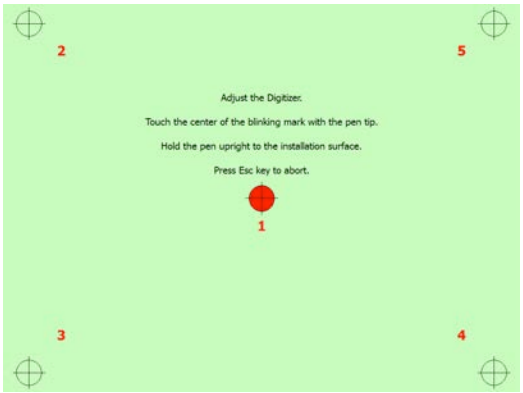
2.2.4.1 **Sensor Adjustment Procedure (Windows version)**

(1) Start "SBAdjust.exe" (When first connected via USB, it starts automatically).
Select "MENU" – "Settings" – "StarBoard" – "StarBoard Settings" and press "Sensor adjustment" in the StarBoard toolbar.

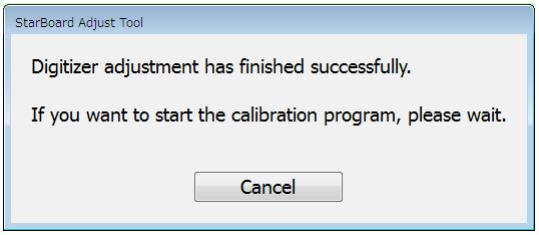
Alternatively,
Run "SBAdjust.exe" located under "My Computer" → "C Drive" (*) → "Program Files" →"Hitachi Software Engineering" → "FX-DUODriver"

(*)This folder path may be changed since it depends on your Windows installation.

(2) Touch the center of the blinking mark with the pen tip.
*Hold the pen upright to the installation surface.
*Do not move the pen until the display in the progress bar reaches 100%.

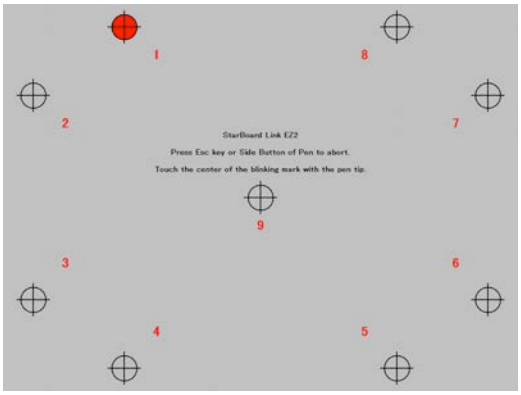


(3) Once the sensor adjustment is properly completed, a message that says "Digitizer adjustment has finished successfully." is displayed. After this, calibration is performed, so please wait.


StarBoard Adjust Tool
Digitizer adjustment has finished successfully.
If you want to start the calibration program, please wait.
Cancel

*If you do not want to calibrate, press the "Cancel" button.

(4) The calibration screen starts.
Use the pen to click on the center of the flashing circles in order. Continue pressing the pen to the center to a circle until it turns from red to green. If clicking is performed properly, the circle turns grey.
*Hold the pen upright to the installation surface.



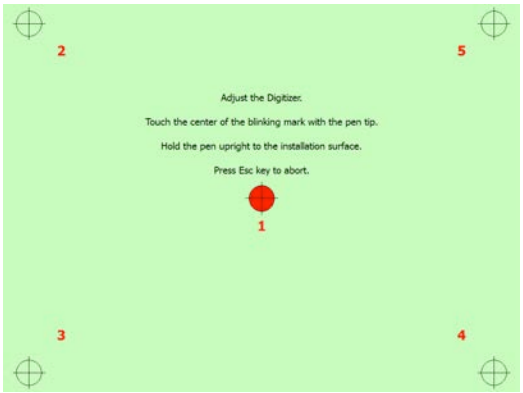
Once you click on the center of all nine circles, a dialogue box that says "Calibration completed" is displayed. Press "OK" to finish calibration.

This completes sensor adjustment.

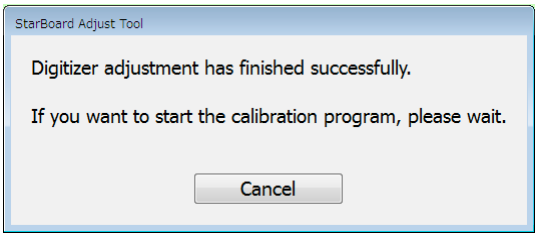
2.2.4.2 Sensor Adjustment Procedure (Mac version)

(1) Start "SBAdjust" (When first connected via USB, it starts automatically).
Start "Go" → "Applications" → "StarBoard" → "Lsadrv" folder → "SBAdjust".

(2) Touch the center of the blinking mark with the pen tip.
*Hold the pen upright to the installation surface.
*Do not move the pen until the display in the progress bar reaches 100%.

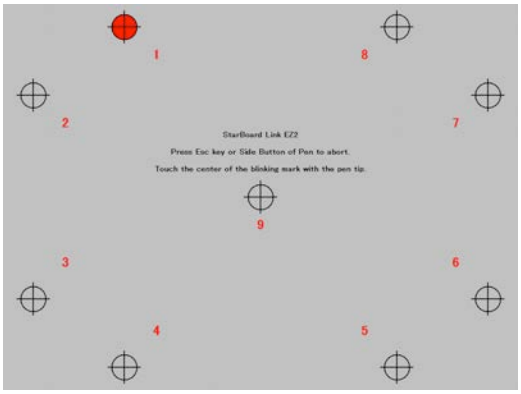


(3) Once the sensor adjustment is properly completed, a message that says "Digitizer adjustment has finished successfully." is displayed. After this, calibration is performed, so please wait.


StarBoard Adjust Tool
Digitizer adjustment has finished successfully.
If you want to start the calibration program, please wait.
Cancel

*If you do not want to calibrate, press the "Cancel" button.

(4) The calibration screen starts.
Use the pen to click on the center of the flashing circles in order. Continue pressing the pen to the center to a circle until it turns from red to green. If clicking is performed properly, the circle turns grey.
*Hold the pen upright to the installation surface.



Once you click on the center of all nine circles, a dialogue box that says "Calibration completed" is displayed. Press "OK" to finish calibration.

This completes sensor adjustment.

2.2.5 Positioning Alignment

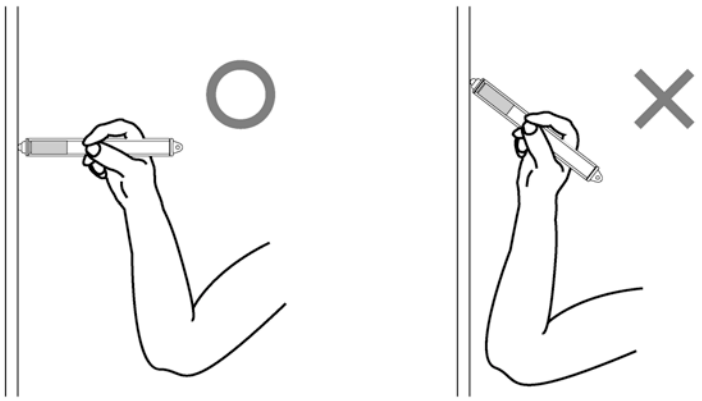
Select "MENU" on the StarBoard Software toolbar → "Settings" →"StarBoard" → "Calibrate" → "OK". and then perform position alignment.

3. How to Use

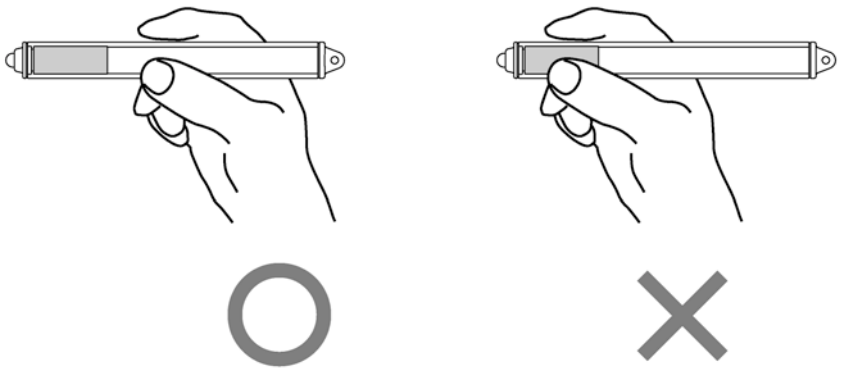
3.1 How to Use The Pen

To use the pen to draw letters or images, press the tip of the pen to the projection area and move the pen. Remove the tip of the pen from the projection area to finish writing. Keep in mind the following points when using the pen.

(1) When drawing with the pen, hold the pen perpendicular to the projection area as much as possible and continue pressing the pen tip to the projection area to draw. Holding the pen diagonally may cause input to not be detected properly.



(2) Reflective materials for detecting input are used in the silver part of the pen tip. If you hold the reflective part and draw letters or images, the pen's input may not be detected properly. If the letters or images you draw on the projection area are not detected properly, change the way you are holding the pen, and check if they are displayed properly.



3.2 Start Method

3.2.1 Start Method (Windows version)

(1) Connect the USB cable of digitizer to the PC.

(2) Turn on the power switch of the projector.

(3) Turn on the power switch of the PC to start Windows.

(4) Adjust the position of the projector so that the Windows screen projected by the projector is within the input area (refer to page 1-3 of this User's Guide).

(5) Select "Start" → "All Programs" → "StarBoard Software", or double-click the StarBoard icon on the desktop.

If the "No connection" icon in below appears on the Tasktray, it means that the StarBoard is not connected. Make sure that the StarBoard and the PC are properly connected.

Connected	No Connection

If the StarBoard is properly connected, the icon changes to "Connected" as above. If the icon does not change despite correcting the connection, there may be some other problem. For details, refer to "4. Appendix Troubleshooting" on page 4-1 of this User's Guide.

If the positions of the pen tip and cursor are out of alignment, select "MENU" on the StarBoard Software toolbar → "Settings" → "StarBoard"→ "Calibrate," and then perform position alignment.

Important

Run the "Adjusting the Sensor (See page 2-6 to 2-9 of this User's Guide.)" when operated for the first time, and whenever the board is moved.

Not doing so may cause operation errors.

3.2.2 Start Method (Mac version)

(1) Connect the USB cable of digitizer to the computer.

(2) Turn on the power switch of the projector.

(3) Turn the computer power switch on to startup Mac.

(4) Adjust the position of the projector so that the Mac screen projected by the projector is within the input area (refer to page 1-3 of this User's Guide).

(5) Select "Go" → "Applications" → "StarBoard Software" to start StarBoard Software.

(6) Select "MENU" on the StarBoard Software toolbar → "Settings" → "StarBoard" → "Check Connection," and then check the connection.

If the "StarBoard is not connected" message appears, StarBoard Software has not detected the StarBoard. Check whether the StarBoard and PC are connected properly.

Connected	No Connection

If they are connected properly, the "StarBoard is connected" message appears. If the indication does not change even though you have checked the connection, there is likely to be some problem. For details, see "4. Appendix Troubleshooting" on page 4-1 in this user's guide.

If the positions of the pen tip and cursor are out of alignment, select "MENU" on the StarBoard Software toolbar → "Settings" → "StarBoard" → "Calibrate," and then perform position alignment.

Important

Run the "Adjusting the Sensor (See page 2-6 to 2-9 of this User's Guide.)" when operated for the first time, and whenever the board is moved.

Not doing so may cause operation errors.

4. Appendix

4.1 Troubleshooting

Before assuming the product is broken, be sure to check adjustments, proper handling procedures, the possibility of faulty cable connections, etc.

Recognition-Related Problems

Problem	What to check	What to do
The StarBoard does not recognize input.	Is the USB cable connected to the PC?	Connect the USB cable to the PC.
	Is the status LED (page 1-3) lit green?	Check the USB cable connection.
	Did you start the system in the correct sequence?	Start the system in the correct sequence. (For details on starting the system, see page 3-2 of this User's Guide.)
	In case that USB cable extended as bellow, it may result in unstable of product working. ・USB extension cable other than bundled one ・Bus-powered USB hub ・USB extender	When connecting to the PC, use the bundled USB extension cable. If you need to extend USB cable, use self-powered USB hub.
	StarBoard Software files may be broken or installation may not be complete correctly.	Uninstall the StarBoard Software and then re-install it. （For details on installing StarBoard Software, see the StarBoard Software Installation Guide.)
	Other than the above	Contact a support center.

Recognition-Related Problems

Problem	What to check	What to do
Touch Sensor Error (USB error)	The controller must be reset and the system restarted.	Disconnect the USB cable and reconnect it. If this does not solve the problem, restart the PC.
	In case that USB cable extended as bellow, it may result in unstable of product working. ・USB extension cable other than bundled one ・Bus-powered USB hub ・USB extender	When connecting to the PC, use the bundled USB extension cable. If you need to extend USB cable, use self-powered USB hub.
Touch Sensor Error (Insufficient USB bandwidth)	Is a high-speed USB device connected to the USB host controller used to connect the StarBoard?	Be sure to connect the StarBoard and any high-speed USB devices to separate USB host controllers. In case that PC only has one USB host controller, use self-powered USB hub.

Input-Related Problems

Problem	What to check	What to do
The input position does not match.	Has position alignment been performed properly?	Perform proper position alignment.
	Other than the above	Contact a support center.
The position cannot be aligned properly.	Have the StarBoard and projector been placed in the proper orientation?	Adjust the position of the StarBoard and the projector. If undue correction is performed, it may not be possible to align the position properly.
	Is the PC screen being projected inside the StarBoard's input area?	Make sure the PC screen projection is contained within the StarBoard's input area. （For details on the input area, see page 1-3 of this User's Guide.）
	StarBoard Software files may be broken or installation may not be complete correctly.	Uninstall the StarBoard Software and then re-install it. （For details on installing StarBoard Software, see the StarBoard Software Installation Guide.）
	Other than the above	Contact a support center.

Input-Related Problems

Problem	What to check	What to do
The pen does not operate, or its operation is unstable.	Are you holding the pen properly?	Please check page 3-1 of this user's guide, "How to Use The Pen", and try to input again with the correct way of holding the pen.
	Did you perform sensor adjustment?	Perform "Adjusting the Sensor" on page 2-6 of this user's guide, and check if you can perform input.
	Have you installed this product in an environment that might affect its operation?	Please check the contents of the notification on page 11 of this user's guide, and if there is an applicable item, please take the appropriate measures.
	Other than the above	Restart Windows/Mac OS or StarBoard Software.
		Contact a support center.
		Check if the same problem arises when using another pen. If operations are normal when using another pen, the original pen is the problem.

4.2 System Specifications

Item	Specification
Model name	StarBoard Link EZ2-Pen
Detection method	Infrared image sensor system*1
Digitizer resolution	0.05mm
Sampling rate	Approx. 100 points/second when using (USB1.1 Full Speed)
Interface	USB 1.1 (cable length：6m)
Effective screen size	60 – 90 inches (for 4:3 /16:10 aspect ratio)
Dimensions	Digitizer: 510mm(W)×75.5mm(H)×41mm(D) Pen: 140mm × φ15mm
Weight	Digitizer 0.8kg, Pen 15g
Power consumption	5V 500mA
Operating requirements	+5°C – 35°C (Humidity: 20 – 80% RH, without condensation)
Storage requirements	-10°C – +45°C (Humidity: 20 – 80% RH, without condensation)
Standards, etc.	VCCI Class A, FCC Class B, CE

*1 Using infrared and compact cameras, this product captures the image (reflected light) of a pen and detects the corresponding coordinate position. Do not operate near lighting that will obstruct the capture of the image. This includes:

- Locations where the surface or side of the projection area are exposed to direct sunlight.
- Locations in which there are light fittings with many light bulbs or infrared rays directly above the projection area.
- The place where there is some reflective object around projection area.
  (Reflective bars or pen which is not used interactive white board built-in reflection tape, etc...)

Depending on installation conditions or sensor property, position detection may be off by about 20 mm.

4.3 Proper Care and Cleaning

Clean the StarBoard periodically so that you may use it for a long time to come.

(1) Digitizer Cleaning

- When cleaning the digitizer, use a soft cloth dampened with a diluted neutral cleansing agent that does not contain a polishing compound.
- Never use a solvent such as thinner.
- Note that rubbing or striking the StarBoard surface with a finger nail or other hard object may result in scratching.

(2) Cleaning the Magnets

- Use a soft cloth dampened with water or alcohol to remove dirt from the magnet sections of the digitizer.
- Do not use cleaners etc. that contain surfactant, as doing so will reduce the retaining force of the magnets.

(3) Cleaning the pen

- To clean the pen, use a diluted neutral cleansing agent that does not contain a polishing compound. Do not apply the neutral cleansing agent directly, but rather dampen a soft wet cloth with a mixture of water and the cleaner, and wipe. Never use a solvent such as thinner.
- Do not allow the pen tip to get wet.

4.4 Replaceable Parts

(1) Pen (Reflective Pen)

For details on obtaining them, contact your dealer or a support center.

4.5 Product Warranty Policy

1. During the free warranty service period, if a malfunction occurs during normal use, the malfunction will be corrected without charge, according to the provisions of the warranty. Furthermore, if the customer registration card accompanying the warranty is not returned to our company, the customer information will not be registered; so free repairs might be unavailable. After receiving this product, please immediately fill out and return this customer registration card.

2. The warranty coverage is listed in the following table:

Product Name	Part Name	Warranty Coverage
StarBoard Link EZ2-Pen	Digitizer	＋
	USB extension cable	＋
	Pen (Reflective Pen)	－

（Explanatory note）: ＋ → Covered by warranty (However, this excludes abrasion, physical damage, and loss)

－ → Not covered by warranty

3. Please refer to the warranty sheet for this product's warranty service period.

4. Even during the warranty period, there will be a repair charge in the following cases:
   (1) If the registration card accompanying the warranty is not returned to our company.
   (2) If the warranty is not presented.
   (3) If specified fields on the registration card accompanying the warranty are not completed, or if the wording has been changed without authorization.
   (4) The warranty applies only to the original purchasers. (It does not apply to a third party to whom the customer resold this product.)
   (5) In the event of a malfunction or damage resulting from the customer's improper handling (e.g., a fall, impact, etc., caused by the customer during transportation or movement).
   (6) In the event of problems resulting from handling contrary to the handling and precautions mentioned in this user's guide.
   (7) In the event of failure or damage resulting from abnormal voltages, pollution or other natural disasters (e.g., fire, earthquake, and lightning).
   (8) In the event of a malfunction in this product caused by the connection to this product of equipment other than the equipment specified by our company.
   (9) In the event that there is no abnormality in this product, but a defect in a part other than this product was detected or remedied.
   (10) In the event of ordinary wear and tear, wear, deterioration, etc., of consumables, even during normal use.

5. If this product malfunctions, review the contents of this user's guide. If the problems remain irreparable, contact the dealer. The dealer will determine whether or not the product must be repaired, so please contact them. If the customer sends the product to our company without RMA (Return Merchandise Authorization) number, it might not be covered by warranty.

6. As a rule, the customer is responsible for shipping charges required to send all or part of the product for repair, etc. Our company will assume responsibility for the return shipping to the customer.

7. This warranty does not cover labor fees for repair-associated equipment assembly or disassembly.

8. Incidental damage caused by the failure of this product (e.g., loss of profit that should have resulted from the use of this product) is outside the scope of this warranty.

9. The aforementioned provisions define this warranty, and they supersede those of all express or implied warranties that include legal defect liability.

10. This warranty is limited to use of this product within the country where the user bought this product.